

Bureau of Chemical and Environmental Services

Inorganic Environmental Testing

Inorganic Section

Inorganic chemicals are usually non carbon containing chemicals which make up the mineral content of any water sample. Evaporation of any water sample leaves behind the residue of inorganic chemicals which were dissolved in water. The Inorganic Section of the Public Health Laboratory performs 34 methods to characterize water samples taken from Utah's public water supplies and from the environment of our lakes and rivers.

EPA has set drinking water limits for such inorganic chemicals as Fluoride, Cyanide, Sulfate, Total Dissolved Solids, and Nitrate. Inorganic nutrients such as Nitrate and Phosphate can have important impacts for algae production in lakes and rivers of our state, and may be an overall indicator of water pollution in the watershed. Chlorophyll measurements made from water bodies are another important pollution indicator in Utah. Perchlorate is an inorganic chemical of more recent concern for Utah, and has been associated with contamination from fireworks, industrial rocket production, and other sources.

Although the 34 methods are too numerous to mention here, they are listed in our client services manual (<http://health.utah.gov/lab/chemistry/chemservicemanual.pdf>, pages 13 to 35.)